

Commissioning of the NOvA Near Detector On the Surface

Peter Shanahan

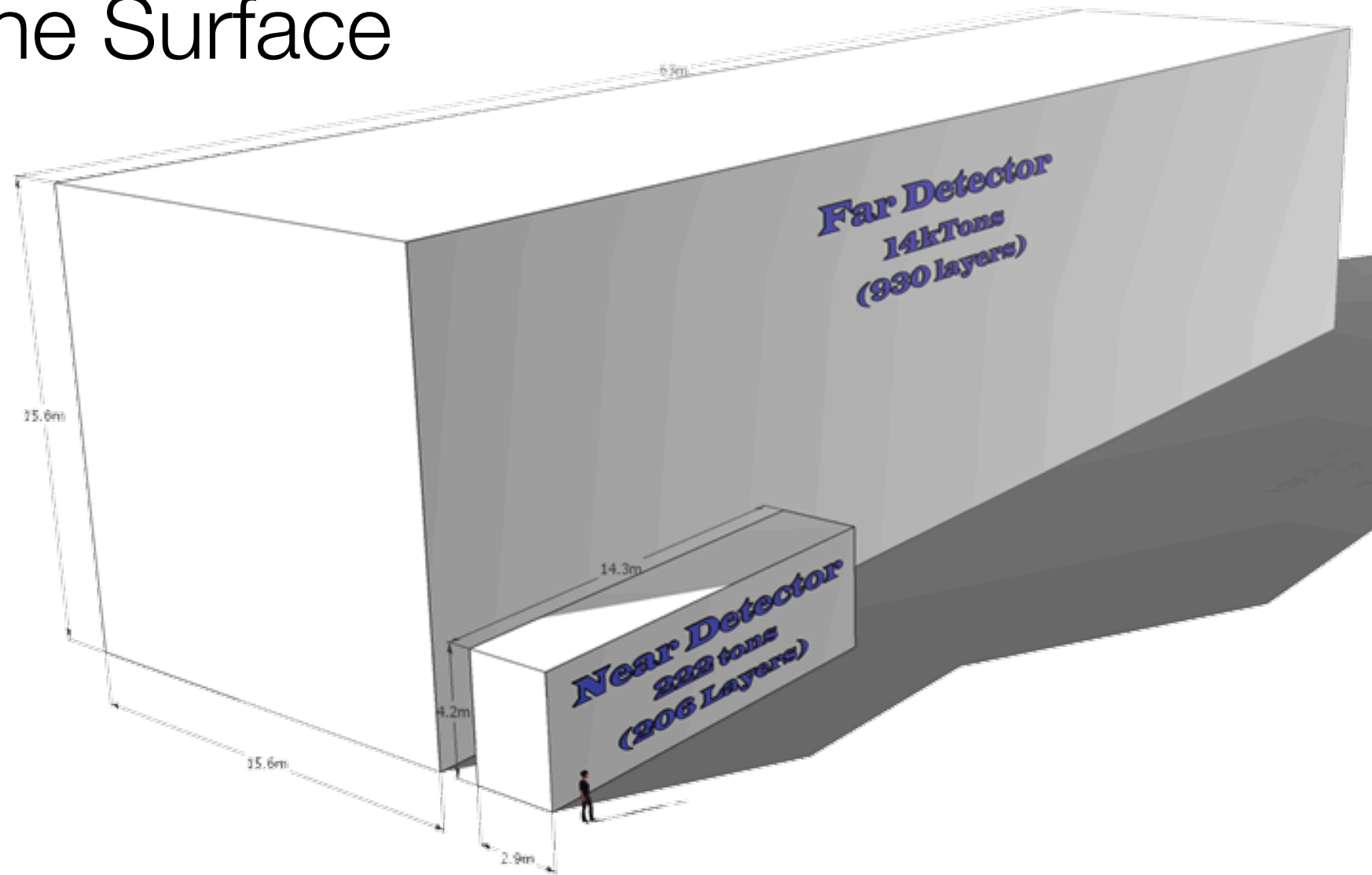
Fermilab

20 December 2010

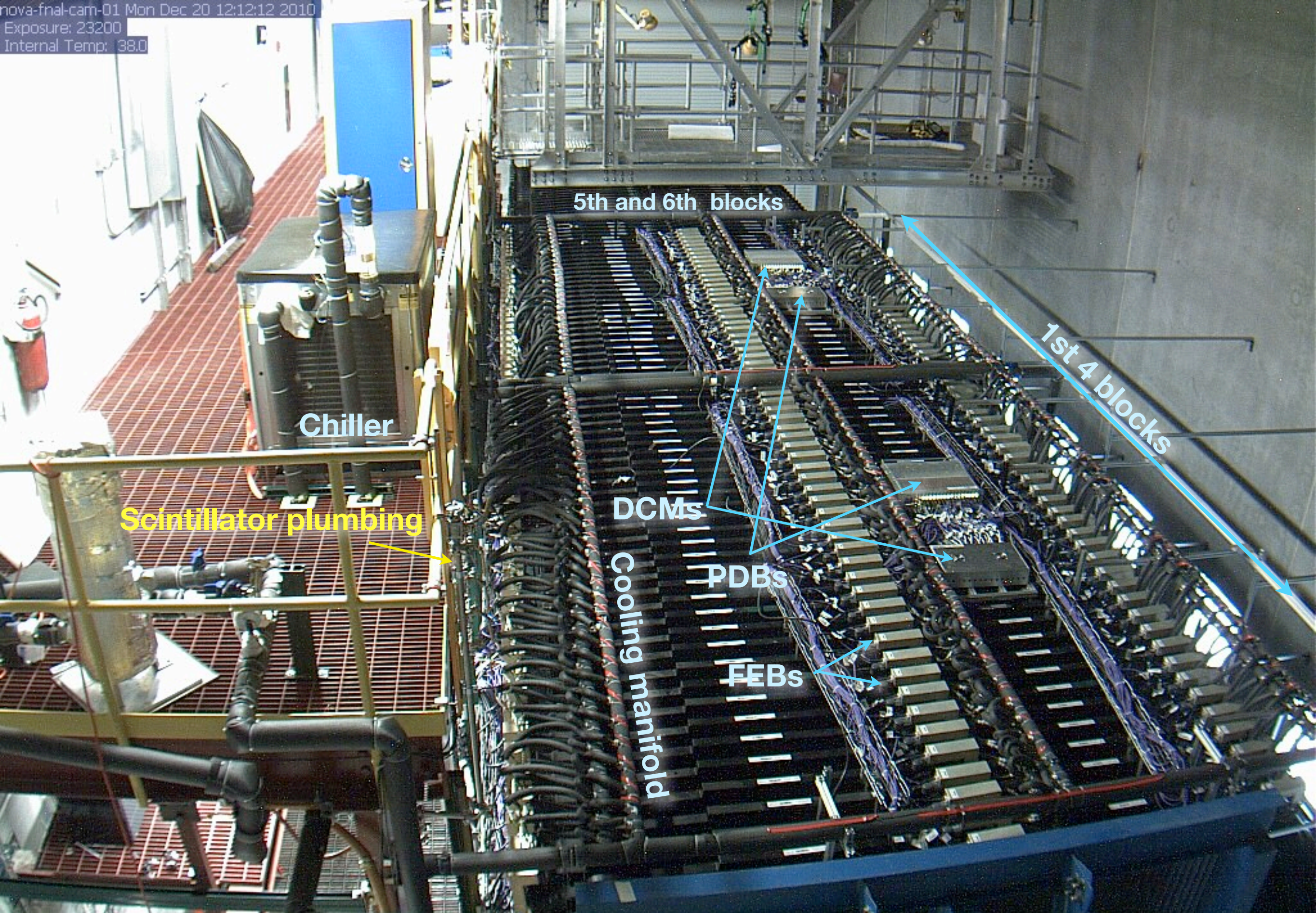
NOvA

Near Detector On the Surface

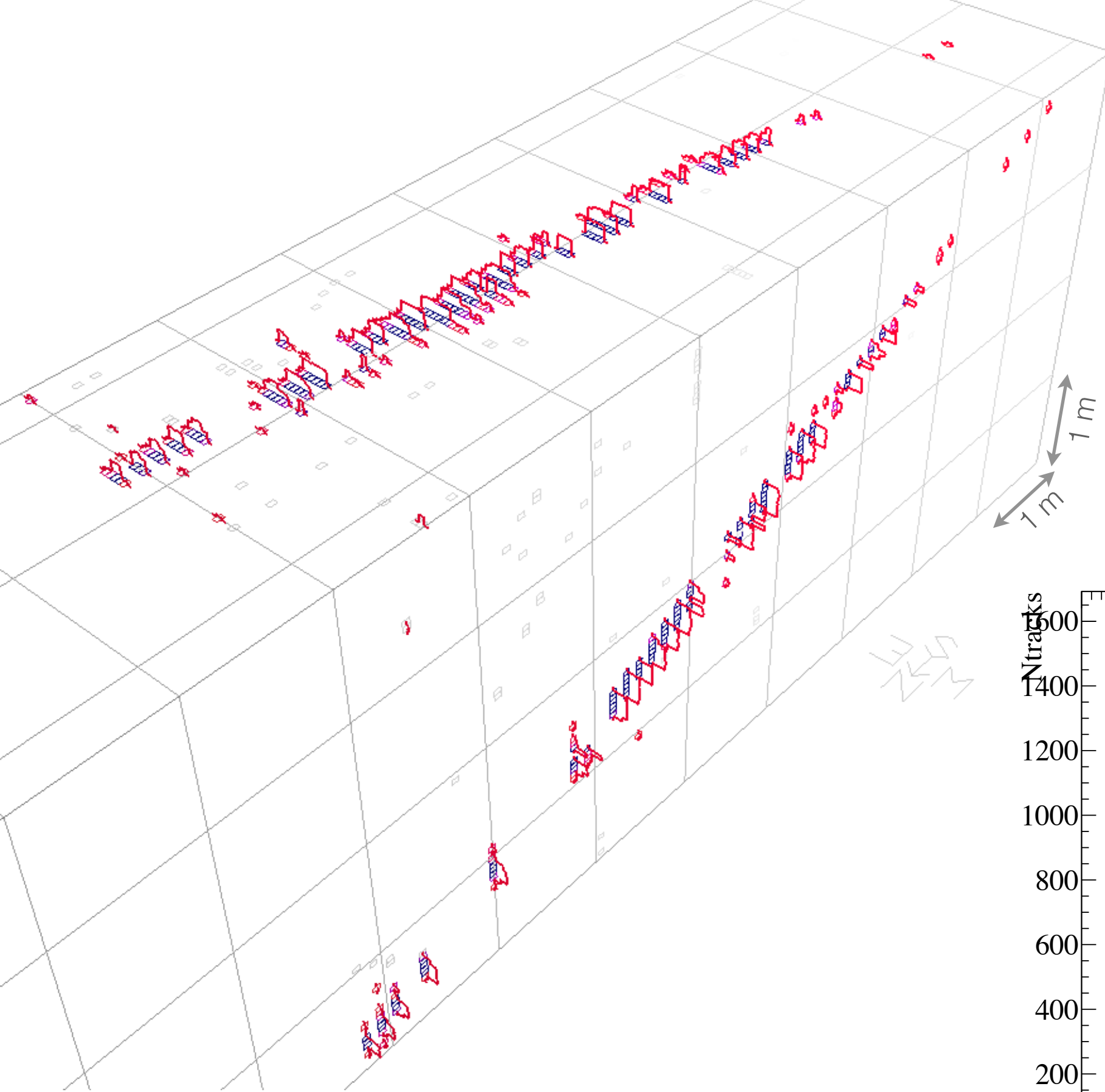
During summer and fall NOvA has been building its near detector in a surface building near the MINOS surface building



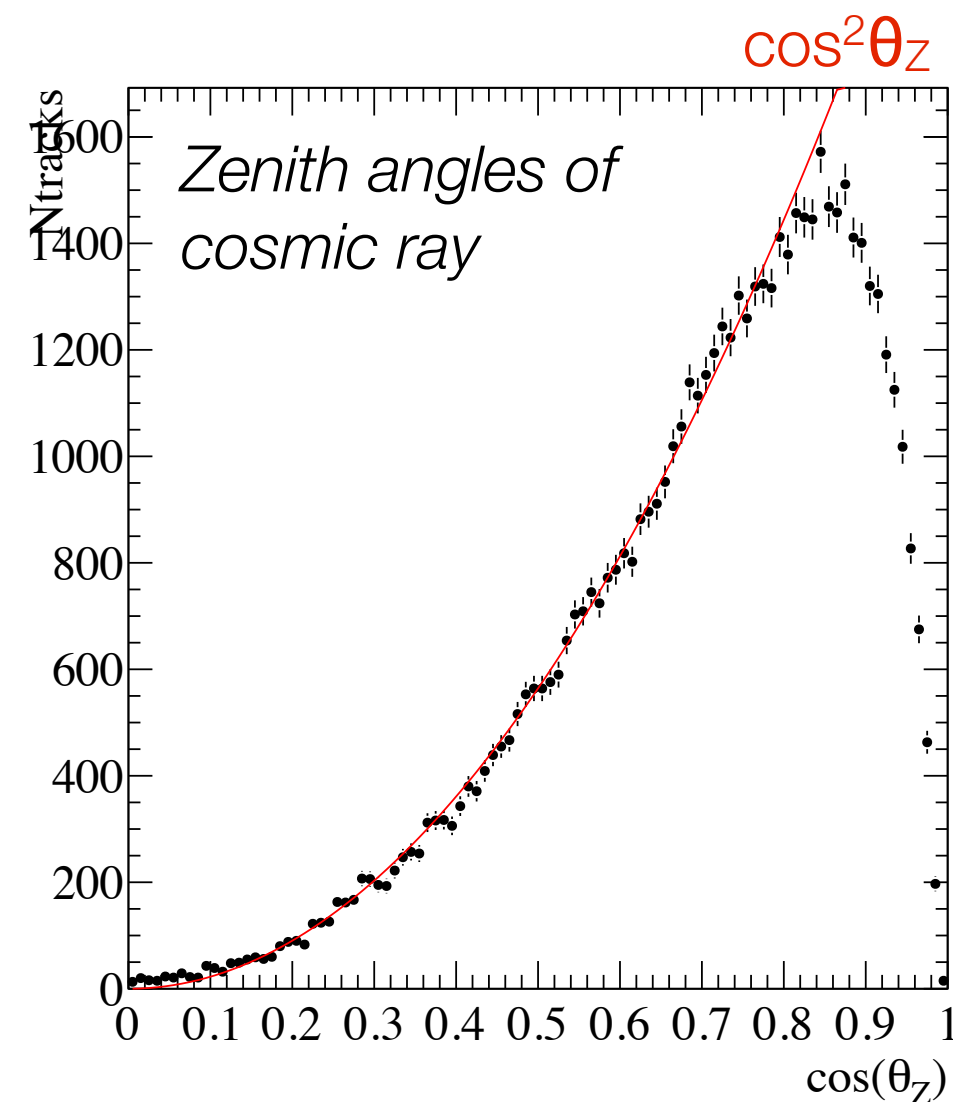
- Primary motivation is to make a full system test of installation and integration to prepare for construction of the far detector at Ash River
- Sees NuMI beam at an off-axis angle of 110 mrad. Will provide useful neutrino data for physics readying calibration, reconstruction, and analysis for far detector data



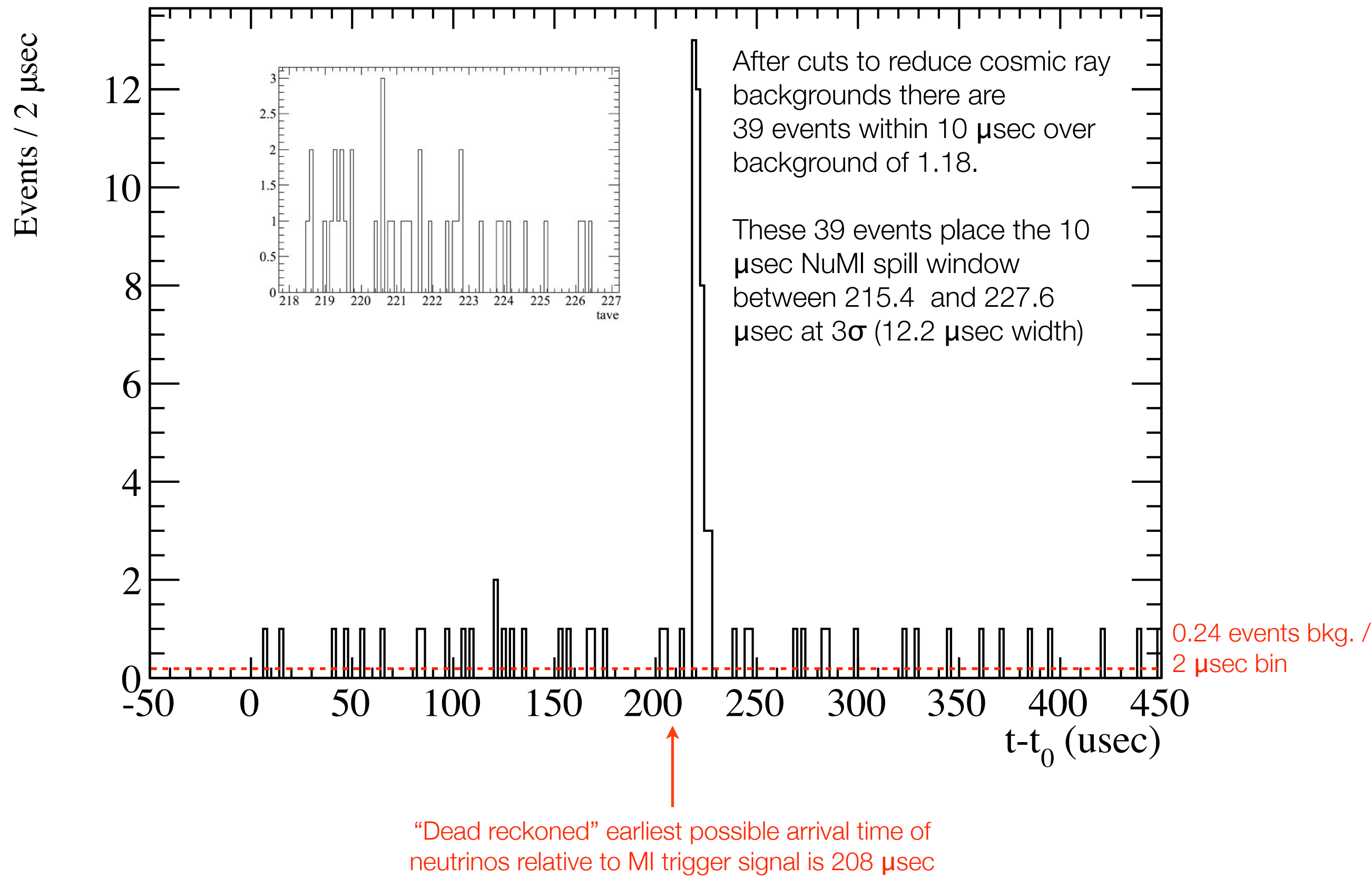
Four blocks filled with scintillator and operational



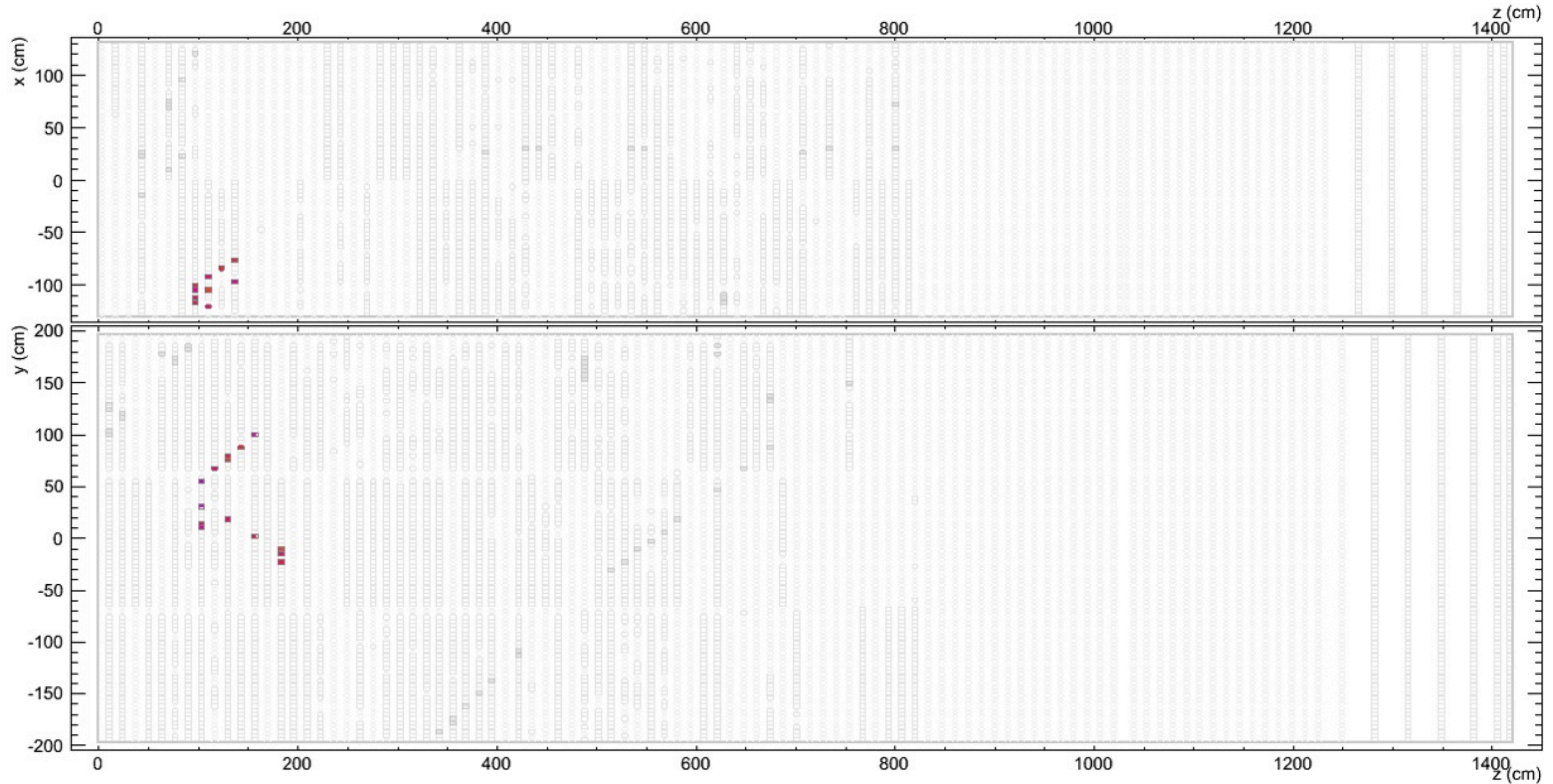
We've been running the detector since the end of November and have recorded a large number of cosmic rays, including this large cosmic ray EM shower recorded on December 7th, 2010



Timing in NuMI Spill



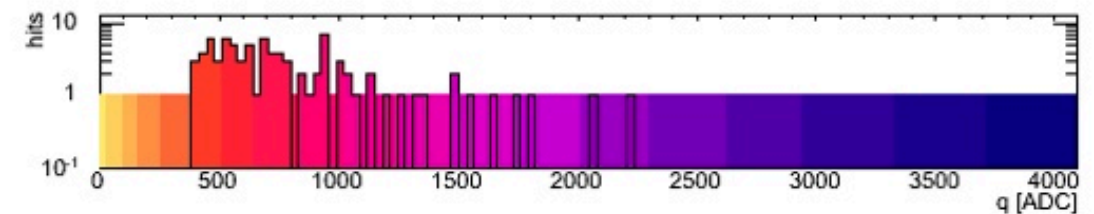
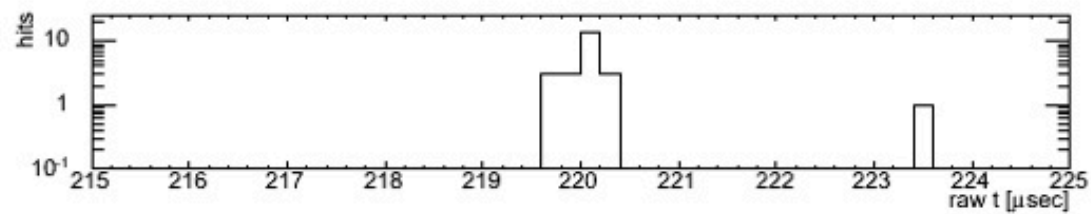
1st Neutrino Event on December 15th



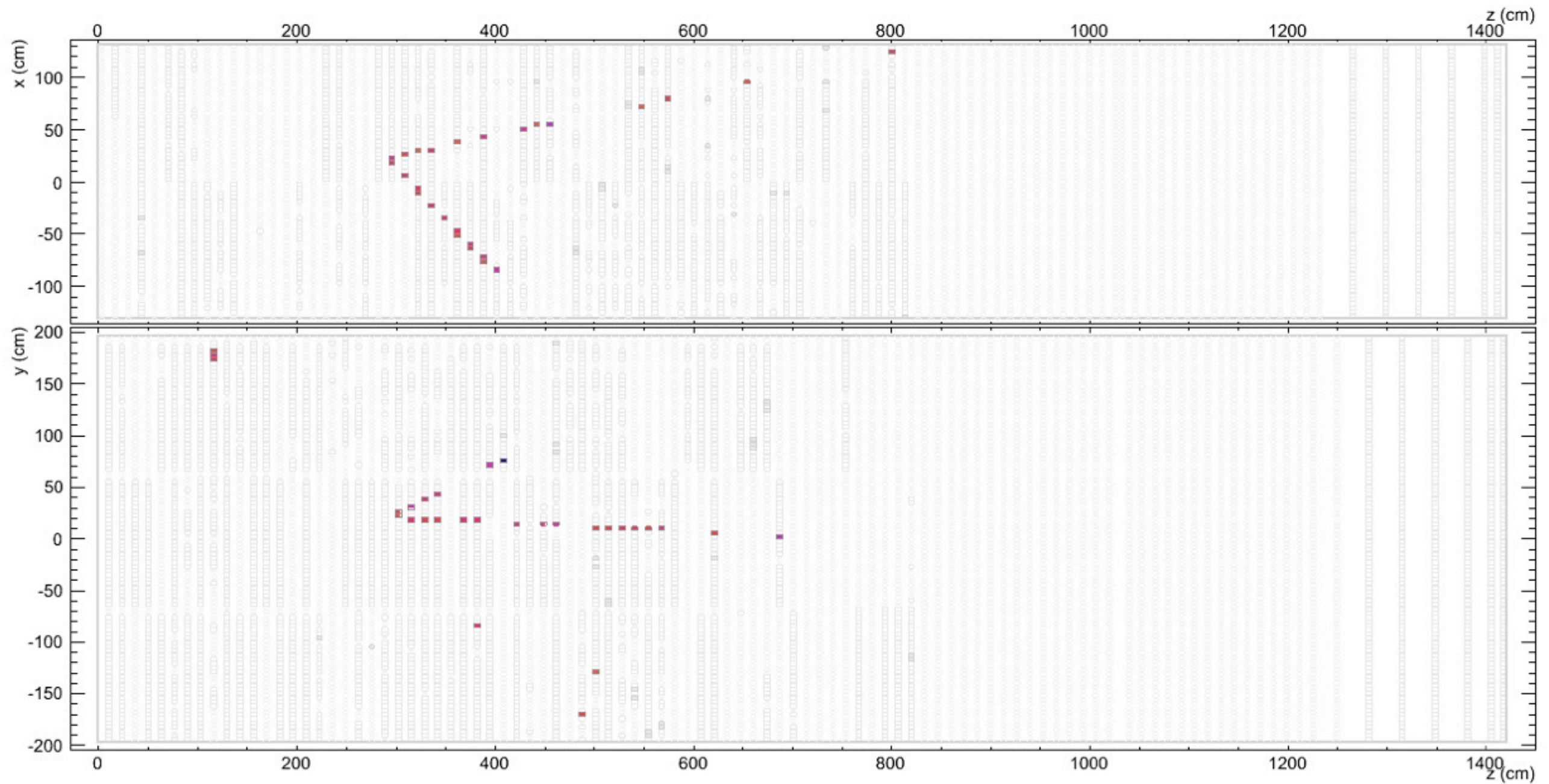
NOvA - FNAL E929

Run: 10796/1

Event: 2160



Another example recorded last night



NOvA - FNAL E929

Run: 10868/4

Event: 175773

